



HARVARD UNIVERSITY  
DEPARTMENT OF ECONOMICS

CAMBRIDGE, MASSACHUSETTS 02138

December 21, 1988

Joshua Lederberg, President  
The Rockefeller University  
New York, NY 10021

Dear President Lederberg:

I was surprised and much interested to receive your note dated December 2, asking about the literature on group testing. Actually, I do not follow that literature, but occasionally people are kind enough to send me reprints or manuscripts dealing with that topic. I am enclosing the bibliographies from two reprints that were sent to me about ten years ago.

Most recently, I received a manuscript presenting a different kind of application, namely Joseph L. Gastwirth and Patricia A. Hammick, "Estimation of the Prevalence of a Rare Disease, Preserving the Anonymity of the Subjects of Group Testing; Application to Estimating the Prevalence of AIDS Antibodies in Blood Donors." The idea is simply to estimate the prevalence of AIDS simply on the basis of the proportion of contaminated groups found in a large sample. Gastwirth is a professor of statistics at George Washington University, Washington, D.C.

I have heard a number of industrial applications. One is to test thermionic vacuum tubes by wiring a group in series; if any of the tubes has a broken circuit, none will light. Unfortunately, I do not have any of those references.

I believe that Professor Milton Sobel of the School of Statistics, University of Minnesota, has been compiling a bibliography on group testing. Perhaps you should get in touch with him.

Sincerely yours,

Robert Dorfman  
Professor of Political Economy,  
Emeritus

RD/dc  
Enclosures

(X) ... ↓ p27x  
... ↓ RD